



**EUROPEAN PATENT APPLICATION**

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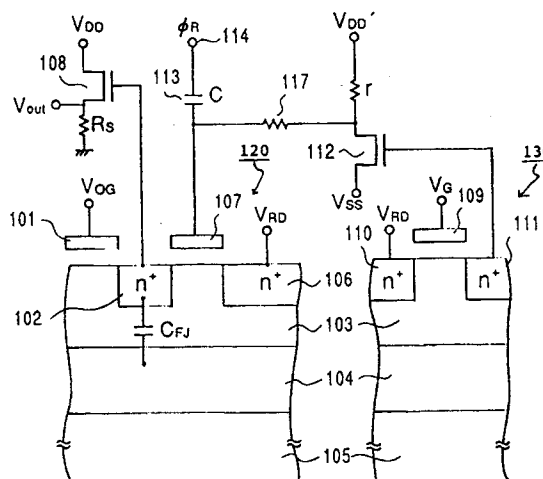
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⑤ Charge detecting device.

57) A charge detecting device comprises a floating diode for accumulating signal charge, a source-follower amplifier (108) for detecting a variation in a surface potential of the floating diode, a reset transistor (120), a transistor (130) having a same size to the reset transistor (120) for detecting a channel potential of the reset transistor (120) and a reset pulse supplying means including an inverter amplifier (112), in which the channel potential of the reset transistor (120) detected by the transistor (130) is amplified and is added with a binary digit pulse inputted through an AC-coupled capacitor to be made into a reset pulse which is applied to a gate electrode of the reset transistor. This allows to automatically set each level of the suitable reset pulse in response to a variation of the channel potential of the reset transistor (120) without any external circuits for setting reset pulse levels.

FIG. 2





European Patent  
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# EUROPEAN SEARCH REPORT

Application Number

DOCUMENTS CONSIDERED TO BE RELEVANT			EP 92109572.5
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	US - A - 4 809 307 (SAKAUE) * Fig. 3,5; column 3, lines 17-48; column 5, lines 3-25 *	1	H 01 L 27/148 G 11 C 19/28
A	--	2-6	
A	US - A - 4 631 739 (HANDY) * Totality *	1-6	
A	US - A - 4 355 244 (BENOIT-GONIN) * Fig. 1,3; column 2, line 16 - column 6, line 61 *		
A	US - A - 4 740 908 (BERGER) * Fig. 1,2; column 2, line 60 - column 3, line 26 *		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 01 L G 11 C H 04 N
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 29-06-1994	Examiner HEINICH
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	